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EXAMINER	
KHAN, USMAN A	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/648,445	BEAN ET AL.	
	Examiner	Art Unit	
	Usman Khan	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 20 August 2007.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-28 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-28 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 23 August 2007 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/20/2007 has been entered.

Response to Arguments

Applicant's arguments filed on 08/20/2007 with respect to claims 1 - 28 have been considered but are moot in view of the new ground(s) of rejection.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 2, 13, 24, 25, and 27 – 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Parulski et al. (US patent No. 5,668,597).

Regarding **claim 1,** Parulski et al. discloses a method of selectively reading less than all information available at an output of an image sensor (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2

lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped) for which member-pixels of a subset of an entire set of pixels are individually addressable (figures 3, 10, and 11), the method comprising: sampling information, at the output of the image sensor, representing targeted member-pixel of the subset without having to read information representing the entire set of pixels (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped); and selectively reading information, at the output of the image sensor, representing another one or more but fewer than all member pixels of the entire set based upon the sampling information without having to read information representing all pixels on the image sensor (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped).

and accessing a first set of sampling photo-sensing pixels of the image sensor and accessing a second set of non-sampling pixels of the image sensor, wherein the first and the second set of pixels have different physical circuitry addressing and control lines going to them, respectively (fast dumping via fast dump structure 62 figures 2A -2B item 62 and column 7 lines 19 – 57; also readout via circuit figure 2A item 70 figure 2B items 86 and 88, and figures 4 – 5 item 60).

Regarding **claim 2,** Parulski et al. discloses the method of claim 1, further comprising: reading information, at the output of the image sensor, representing member-pixels of the entire set that are located within a predetermined area adjacent to or surrounding the targeted member-pixel of the subset (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped).

Regarding **claim 13,** Parulski et al. discloses a method of selectively reading data available at an output of an image sensor, the method comprising: reading less than all data available at an output of an image sensor for which selected ones but not all of the entire set of pixels are individually addressable (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped).

and accessing a first set of sampling photo-sensing pixels of the image sensor and accessing a second set of non-sampling pixels of the image sensor, wherein the first and the second set of pixels have different physical circuitry addressing and control lines ,going to them, respectively (fast dumping via fast dump structure 62 figures 2A - 2B item 62 and column 7 lines 19 – 57; also readout via circuit figure 2A item 70 figure 2B items 86 and 88, and figures 4 – 5 item 60).

Regarding **claim 24,** Parulski et al. discloses a digital camera (Abstract and figure 1) comprising: a pixel-differentiated image sensor for which member-pixels of a subset of the entire set of pixels are individually addressable (figures 3, 10, and 11), the image sensor being controllable to read less than all of the pixels without having to read all of the pixels (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped); and a processor operable to obtain sampling information from a targeted member-pixel of the subset without having to read information from the entire set of pixels (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped); and selectively obtain information from another one or more but fewer than all member pixels of the entire set based upon the sampling information without having to read all of the pixels on the image sensor (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped).

A first set of sampling photo-sensing pixels of the Image sensor; and a second set of non-sampling pixels of the image sensor; wherein the first and the second set of pixels have different physical circuitry addressing and control lines going to them, respectively (fast dumping via fast dump structure 62 figures 2A -2B item 62 and

column 7 lines 19 – 57; also readout via circuit figure 2A item 70 figure 2B items 86 and 88, and figures 4 – 5 item 60).

Regarding **claim 25,** Parulski et al. discloses the digital camera of claim 24, wherein the processor is operable to selectively obtain information from member-pixels of the entire set that are located within a predetermined area adjacent to or surrounding the targeted member-pixel of the subset (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped).

Regarding **claim 27,** Parulski et al. discloses a digital camera (Abstract and figure 1) comprising: a pixel-differentiated image sensor for which selected ones of the entire set of pixels are individually addressable (figures 3, 10, and 11), the image sensor being organized into a matrix of partitions (figures 3, 10, and 11), each partition including a member-pixel of the subset referred to as a sampling pixel (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped); and a processor operable to obtain sampling data from a sampling pixel without having to obtain information from the other pixels in the corresponding partition (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read;

column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped), and selectively obtain data from at least the entire corresponding partition but fewer than all of the partitions depending upon the sampled-data without having to obtain information from all of the pixels on the image sensor (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped);

and access a first set of sampling photo-sensing pixels of tile image sensor and access a second set of non-sampling pixels of the image sensor, wherein the first; and the second set of pixels have different physical circuitry addressing and control lines going to them, respectively (fast dumping via fast dump structure 62 figures 2A -2B item 62 and column 7 lines 19 – 57; also readout via circuit figure 2A item 70 figure 2B items 86 and 88, and figures 4 – 5 item 60).

Regarding **claim 28,** Parulski et al. discloses the digital camera of claim 27, wherein the processor is operable to selectively obtain data from partitions located within a predetermined area adjacent to or surrounding the sampling pixel (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 – 9, 14 – 20, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (US patent No. 5,668,597) in view of Kinjo et al. (US patent No. 6,631,208).

Regarding **claims 3**, as mentioned above in the discussion of claim 2, Parulski et al. teaches all of the limitations of the parent claims. However, Parulski et al. fails to disclose organizing the entire set of pixels into partitions, each partition having multiple pixels; mapping one or more of the partitions one or more of the member-pixels of the subset, respectively; reading information, at the output of the image sensor, representing all member-pixels of the subset so as to generate a plurality of samples; handling the samples in a manner that preserves a relationship between each sample and corresponding member-pixel of the subset; and reading information, at the output of the image sensor, representing one or more of the partitions mapped to the member-pixels of the subset but not all of the partitions based upon the plurality of samples. Kinjo et al., on the other hand teaches organizing the entire set of pixels into partitions, each partition having multiple pixels; mapping one or more of the partitions one or more of the member-pixels of the subset, respectively; reading information, at the output of the image sensor, representing all member-pixels of the subset so as to generate a

plurality of samples; handling the samples in a manner that preserves a relationship between each sample and corresponding member-pixel of the subset; and reading information, at the output of the image sensor, representing one or more of the partitions mapped to the member-pixels of the subset but not all of the partitions based upon the plurality of samples.

More specifically, Kinjo et al. teaches organizing the entire set of pixels into partitions, each partition having multiple pixels (column 3, lines 32 *et seq. and* figures 15A – 15F and 20A – 20B, column 18 lines 20 – 26); mapping one or more of the partitions one or more of the member-pixels of the subset, respectively (column 3, lines 32 *et seq. and* figures 15A – 15F and 20A – 20B, column 18 lines 20 – 26); reading information, at the output of the image sensor, representing all member-pixels of the subset so as to generate a plurality of samples (column 3, lines 32 *et seq. and* figures 15A – 15F and 20A – 20B, column 18 lines 20 – 26); handling the samples in a manner that preserves a relationship between each sample and corresponding member-pixel of the subset (column 3, lines 32 *et seq. and* figures 15A – 15F and 20A – 20B, column 18 lines 20 – 26); and reading information, at the output of the image sensor, representing one or more of the partitions mapped to the member-pixels of the subset but not all of the partitions based upon the plurality of samples (column 3, lines 32 *et seq. and* figures 15A – 15F and 20A – 20B, column 18 lines 20 – 26).

One of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate the teachings of Kinjo et al. with the teachings of Parulski et al. because in column 3, lines 31 - 50 Kinjo et al. teaches that the use of the invention

provides a processing method which is capable of producing a finished print with a natural feel from a corrected image.

Regarding **claims 4**, as mentioned above in the discussion of claim 1, Parulski et al. teaches all of the limitations of the parent claims. However, Parulski et al. fails to disclose determining if the sampling information exceeds a reference value; and reading information, at the output of the image sensor, representing the one or more but fewer than all member-pixels of the entire set if the sampling information exceeds the reference value. Kinjo et al., on the other hand teaches determining if the sampling information exceeds a reference value; and reading information, at the output of the image sensor, representing the one or more but fewer than all member-pixels of the entire set if the sampling information exceeds the reference value.

More specifically, Kinjo et al. teaches determining if the sampling information exceeds a reference value; and reading information, at the output of the image sensor, representing the one or more but fewer than all member-pixels of the entire set if the sampling information exceeds the reference value (column 3, line 32 - column 4 line 14 and figures 15A – 15F and 20A – 20B, column 18 lines 20 – 26).

One of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate the teachings of Kinjo et al. with the teachings of Parulski et al. because in column 3, lines 31 - 50 Kinjo et al. teaches that the use of the invention provides a processing method which is capable of producing a finished print with a natural feel from a corrected image.

Regarding **claims 5**, as mentioned above in the discussion of claim 4, Parulski et al. in view of Kinjo et al. teaches all of the limitations of the parent claims. Additionally, Kinjo et al. teaches wherein the reference value represents one of a user-determined threshold or a saturation threshold for the targeted member-pixel of the subset (column 17, line 37 – column 18, line 19).

Regarding **claims 6**, as mentioned above in the discussion of claim 4, Parulski et al. in view of Kinjo et al. teaches all of the limitations of the parent claims. Additionally, Kinjo et al. teaches reading information, at the output of the image sensor, representing all member-pixels of the subset so as to generate a plurality of samples (column 3 lines 51 *et seq.*), each member-pixel of the subset having a corresponding reference value, respectively (column 3 lines 51 *et seq.*); applying the determining step to each of the samples (column 3 lines 51 *et seq.*); and reading information, at the output of the image sensor, representing the one or more but fewer than all member-pixels of the entire set located within a predetermined area adjacent to or surrounding member-pixels for which the corresponding sample exceeds the respective reference value (column 17, line 37 – column 18, line 19).

Regarding **claims 7**, as mentioned above in the discussion of claim 4, Parulski et al. in view of Kinjo et al. teaches all of the limitations of the parent claims. Additionally, Kinjo et al. teaches the sampling information is the current sampling information

(column 3 lines 51 *et seq.*) and the reference value is a first reference value (column 17, line 37 – column 18, line 19); and the method further comprises: taking the difference between the current sampling information and the first reference value (column 3 lines 51 *et seq.*); and reading, at the output of the image sensor, representing the one or more but fewer than all member-pixels of the entire set if the difference exceeds a second reference value (column 17, line 37 – column 18, line 19).

Regarding **claims 8**, as mentioned above in the discussion of claim 7, Parulski et al. in view of Kinjo et al. teaches all of the limitations of the parent claims. Additionally, Kinjo et al. teaches wherein the first reference value is the previous sampling information, respectively (column 17, line 37 – column 18, line 19).

Regarding **claims 9**, as mentioned above in the discussion of claim 7, Parulski et al. in view of Kinjo et al. teaches all of the limitations of the parent claims. Additionally, Kinjo et al. teaches setting the first reference value to be equal to the current sampling information if the difference exceeds the second reference value (column 17, lines 37 *et seq.*).

Regarding **claim 14,** as mentioned above in the discussion of claim 13, Parulski et al. teaches all of the limitations of the parent claims. However, Parulski et al. fails to disclose organizing the image sensor into a matrix of partitions, each partition including a member-pixel of the subset referred to as a sampling pixel; selectively reading data

from at least the entire corresponding partition but fewer than all of the partitions depending upon the sampled-data without having to read all of the pixels on the image sensor. Kinjo et al., on the other hand teaches organizing the image sensor into a matrix of partitions, each partition including a member-pixel of the subset referred to as a sampling pixel; sampling data at the output of the image sensor, representing a sampling pixel without having to read information representing the other pixels in the corresponding partition; and selectively reading data at the output of the image sensor, representing at least the entire corresponding partition but fewer than all of the partitions depending upon the sampled-data without having to read all of the pixels on the image sensor.

More specifically, Kinjo et al. teaches organizing the image sensor into a matrix of partitions (column 3, lines 32 *et seq.* figures 15A – 15F and 20A – 20B, column 18 lines 20 – 26), each partition including a member-pixel of the subset referred to as a sampling pixel (it is inherent that each of these partitions will include a sampling pixel); sampling data at the output of the image sensor, representing a sampling pixel without having to read information representing the other pixels in the corresponding partition (column 13, lines 18 *et seq.*); selectively reading data at the output of the image sensor, representing at least the entire corresponding partition but fewer than all of the partitions depending upon the sampled-data without having to read all of the pixels on the image sensor (column 4, lines 2 *et seq.*).

One of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate the teachings of Kinjo et al. with the teachings of Parulski

et al. because in column 3, lines 31 - 50 Kinjo et al. teaches that the use of the invention provides a processing method which is capable of producing a finished print with a natural feel from a corrected image.

Regarding **claims 15**, as mentioned above in the discussion of claim 14, Parulski et al. in view of Kinjo et al. teaches all of the limitations of the parent claims. Additionally, Kinjo et al. teaches reading data at the output of the image sensor, representing partitions located within a predetermined area adjacent to or surrounding the sampling pixel (column 3, lines 32 *et seq.*).

Regarding **claims 16**, as mentioned above in the discussion of claim 14, Parulski et al. in view of Kinjo et al. teaches all of the limitations of the parent claims. Additionally, Kinjo et al. teaches determining if the sampled-data exceeds a reference value; and reading data at the output of the image sensor, representing the one or more but fewer than all member-pixels of the entire set if the sampled-data exceeds the reference value (column 3, line 32 - column 4 line 14 and figures 15A – 15F and 20A – 20B, column 18 lines 20 – 26).

Regarding **claims 17**, as mentioned above in the discussion of claim 16, Parulski et al. in view of Kinjo et al. teaches all of the limitations of the parent claims. Additionally, Kinjo et al. teaches wherein the reference value represents a saturation

threshold for the targeted member-pixel of the subset (column 17, line 37 – column 18, line 19).

Regarding **claims 18**, as mentioned above in the discussion of claim 16, Parulski et al. in view of Kinjo et al. teaches all of the limitations of the parent claims. Additionally, Kinjo et al. teaches wherein: the sampled data is the currently sampled data (column 3 lines 51 *et seq.*) and the reference value is a first reference value (column 17, line 37 – column 18, line 19); and the method further comprises taking the difference between the currently sampled data and the first reference value (column 3 lines 51 *et seq.*), and reading from the one or more but fewer than all member-pixels of the entire set if the difference exceeds a second reference value (column 17, line 37 – column 18, line 19).

Regarding **claims 19**, as mentioned above in the discussion of claim 18, Parulski et al. in view of Kinjo et al. teaches all of the limitations of the parent claims. Additionally, Kinjo et al. teaches wherein the first reference value is the previously sampled data, respectively (column 17, line 37 – column 18, line 19).

Regarding **claims 20**, as mentioned above in the discussion of claim 18, Parulski et al. in view of Kinjo et al. teaches all of the limitations of the parent claims. Additionally, Kinjo et al. teaches setting the first reference value to be equal to the

currently sampled data if the difference exceeds the second reference value (column 17, lines 37 *et seq.*).

Regarding **claim 26,** as mentioned above in the discussion of claim 25, Parulski et al. teaches all of the limitations of the parent claims. However, Parulski et al. fails to disclose wherein the entire set of pixels is further organized into partitions, each partition having multiple pixels; one or more of the partitions being mapped one or more of the member-pixels of the subset, respectively; the processor is operable to read information from all member-pixels of the subset so as to generate a plurality of samples; the processor further being operable to handle the samples in a manner that preserves a relationship between each sample and corresponding member-pixel of the subset, and read information from one or more of the partitions mapped to the member-pixels of the subset but not all of the partitions based upon the plurality of samples. Kinjo et al., on the other hand teaches wherein the entire set of pixels is further organized into partitions, each partition having multiple pixels; one or more of the partitions being mapped one or more of the member-pixels of the subset, respectively; the processor is operable to read information from all member-pixels of the subset so as to generate a plurality of samples; the processor further being operable to handle the samples in a manner that preserves a relationship between each sample and corresponding member-pixel of the subset, and read information from one or more of the partitions mapped to the member-pixels of the subset but not all of the partitions based upon the plurality of samples.

More specifically, Kinjo et al. teaches wherein the entire set of pixels is further organized into partitions, each partition having multiple pixels (column 3, lines 32 *et seq. and* figures 15A – 15F and 20A – 20B, column 18 lines 20 – 26); one or more of the partitions being mapped one or more of the member-pixels of the subset, respectively (column 3, lines 32 *et seq. and* figures 15A – 15F and 20A – 20B, column 18 lines 20 – 26); the processor is operable to read information from all member-pixels of the subset so as to generate a plurality of samples (column 3, lines 32 *et seq. and* figures 15A – 15F and 20A – 20B, column 18 lines 20 – 26; also it is inherent that this process is controlled by a processor); the processor further being operable to handle the samples in a manner that preserves a relationship between each sample and corresponding member-pixel of the subset (column 3, lines 32 *et seq. and* figures 15A – 15F and 20A – 20B, column 18 lines 20 – 26), and read information from one or more of the partitions mapped to the member-pixels of the subset but not all of the partitions based upon the plurality of samples (column 3, lines 32 *et seq. and* figures 15A – 15F and 20A – 20B, column 18 lines 20 – 26).

One of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate the teachings of Kinjo et al. with the teachings of Parulski et al. because in column 3, lines 31 - 50 Kinjo et al. teaches that the use of the invention provides a processing method which is capable of producing a finished print with a natural feel from a corrected image.

Claims 10 -11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (US patent No. 5,668,597) in further view of Horie et al. (US patent No. 6,480,624).

Regarding **claim 10**, as mentioned above in the discussion of claim 1, Parulski et al. teaches all of the limitations of the parent claims. However, Parulski et al. fails to disclose that the method further comprises: measuring an elapsed time; reading information at the output of the image sensor representing all member-pixels of the subset if the elapsed time exceeds a predetermined amount. Horie et al., on the other hand teaches that method comprises: measuring an elapsed time; reading information at the output of the image sensor representing all member-pixels of the subset if the elapsed time exceeds a predetermined amount.

More specifically, Horie et al. teaches that method comprises: measuring an elapsed time (column 8, lines 58 *et seq.*); reading information at the output of the image sensor representing all member-pixels of the subset if the elapsed time exceeds a predetermined amount (column 8, lines 58 *et seq.*).

One of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate the teachings of Horie et al. with the teachings of Parulski et al. because in column 8, lines 58 *et seq.* Horie et al. teaches that the use of the time controlled image pickup will result exposure control, this will in turn result in a improved image.

Regarding **claim 11**, as mentioned above in the discussion of claim 10, Parulski et al. in further view of Horie et al. teach all of the limitations of the parent claims. Additionally, Horie et al. teaches multiple instances of the elapsed time at the output of the image sensor representing all member-pixel of the subset can be measured in the next cycle of the image capture (column 8, lines 58 *et seq.*).

Claims 21 - 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (US patent No. 5,668,597) in view of Kinjo et al. (US patent No. 6,631,208) in further view of Horie et al. (US patent No. 6,480,624).

Regarding **claim 21**, as mentioned above in the discussion of claim 14, Parulski et al. in view of Kinjo et al. teaches all of the limitations of the parent claims. However, Parulski et al. in view of Kinjo et al. fails to disclose that the method further comprises: measuring an elapsed time; reading information at the output of the image sensor representing all member-pixels of the subset if the elapsed time exceeds a predetermined amount. Horie et al., on the other hand teaches that method comprises: measuring an elapsed time; reading information at the output of the image sensor representing all member-pixels of the subset if the elapsed time exceeds a predetermined amount.

More specifically, Horie et al. teaches that method comprises: measuring an elapsed time (column 8, lines 58 *et seq.*); reading information at the output of the image sensor representing all member-pixels of the subset if the elapsed time exceeds a predetermined amount (column 8, lines 58 *et seq.*).

One of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate the teachings of Horie et al. with the teachings of Parulski et al. in view of Kinjo et al. because in column 8, lines 58 *et seq.* Horie et al. teaches that the use of the time controlled image pickup will result exposure control, this will in turn result in a improved image.

Regarding **claim 22**, as mentioned above in the discussion of claim 21, Parulski et al. in view of Kinjo et al. in further view of Horie et al. teach all of the limitations of the parent claims. Additionally, Horie et al. teaches multiple instances of the elapsed time at the output of the image sensor representing all member-pixel of the subset can be measured in the next cycle of the image capture (column 8, lines 58 *et seq.*).

Claim 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (US patent No. 5,668,597) in further view of Examiners Official Notice.

Regarding **claim 12,** Parulski et al. discloses the method of claim 1, wherein the image sensor is one of a CCD image sensor for which the subset is smaller than the entire set (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped). However, Parulski et al. fails to disclose that a CMOS image sensor for which the subset is the same as the entire set (the examiner takes official notice that it is old and well known in the art to get high resolution output from a CMOS

imager sensor the subset is the same size as the entire set i.e. the whole CMOS image sensor is read out).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to get high-resolution output from a CMOS imager sensor the entire CMOS image sensor is read.

Claims 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al. (US patent No. 5,668,597) in view of Kinjo et al. (US patent No. 6,631,208) in further view of Examiners Official Notice.

Regarding **claim 23,** Parulski et al. in view of Kinjo et al. discloses the method of claim 14, wherein the image sensor is one of a CCD image sensor for which the subset is smaller than the entire set (figure 10 lines 1 – 2, 5 – 6, and 9 – 10 also figure 11 lines 1 – 2 and 9 - 10; active pixels being read; column 2 lines 66 *et seq.* and column 6 lines 56 *et seq.*; also figure 10 lines 3 - 4, 7 - 8, and 11 - n also figure 11 lines 3 - 8 and 11 - 16; inactive pixels being dumped). However, Parulski et al. in view of Kinjo et al. fails to disclose that a CMOS image sensor for which the subset is the same as the entire set (the examiner takes official notice that it is old and well known in the art to get high resolution output from a CMOS imager sensor the subset is the same size as the entire set i.e. the whole CMOS image sensor is read out).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to get high-resolution output from a CMOS imager sensor the entire CMOS image sensor is read.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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08/31/2007
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